

1 RECORD OF ORAL HEARING  
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3 UNITED STATES PATENT AND TRADEMARK OFFICE  
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6 BEFORE THE BOARD OF PATENT APPEALS  
7 AND INTERFERENCES  
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10 Ex parte MICHAEL D. ZOECKLER  
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13 Appeal 2007-0008  
14 Application 09/818,023  
15 Technology Center 3700  
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18 Oral Hearing Held: May 15, 2007  
19  
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22 Before MURRIEL CRAWFORD, JENNIFER BAHR, and LINDA  
23 HORNER Administrative Patent Judges  
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26 ON BEHALF OF THE APPELLANT:  
27

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37 The above-entitled matter came on to be heard on May 15, 2007,  
38 commencing at approximately 1:46 p.m., at the United States Patent and

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U.S. PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

1 Trademark Office, 600 Dulany Street, Alexandria, Virginia, before Victoria  
2 L. Wilson, Notary Public.

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4  
5 USHER: Calendar Number 30. Appeal Number 2007-0008. Mr.  
6 Calvert.

7 MR. CALVERT: Okay. This case is a CIP of the last one.

8 This is kind of what happens when after you have scored the web and  
9 applied the ribbons and so forth, and now you come down to the point where  
10 you want to make transverse scores and as shown in, for instance, figure 9 of  
11 the application.

12 You have the web, 172, and in this case there are these reinforcing  
13 ribbons are applied along each edge of the web. Those are the ribbons 153.  
14 And now we are going to make transverse score lines, 168, across the web.

15 Now, the problem is, though, that if you just make a score line across  
16 the unreinforced part and you put the same score line across the reinforced  
17 part, then when you go to fold it, you tend to get tearing or cracking in the  
18 reinforced area where you fold it.

19 So what we are doing here is to make the fold line in the reinforced  
20 areas wider than the fold line in the unreinforced areas.

21 And another aspect of the invention is that right at the point where  
22 you transition from the narrow fold line to the wide fold line, you have a  
23 transition zone that's shown in, for instance -- in figure 10 is a transition  
24 zone, 173, where you are going from the narrow fold line, 168, into the  
25 upper part, which is wider. That's -- which would be in the reinforced area.

1           And the way they make these fold lines is they can use a plate and die  
2   cutter which has what they call rules -- they are these metal pieces on it --  
3   and down in figure 11, you can see there is a wide rule, I think it is 177, and  
4   the narrow rule is 178.

5           And they come down and the paperboard is resting on a plate, which  
6   has grooves in it which are aligned with the rules, and then the rules press  
7   down into the paperboard, and of course, the reinforcing material as well,  
8   and form the grooves and the transition zone between the two grooves.

9           In the claims, we have two independent claims, 1 and 11 -- and  
10   incidentally, claims 33 to 37 were also involved in this appeal, but they have  
11   been canceled, so we just have claims, I think, 1 to 15 now.

12          And claim -- claim 1, you can see, we are advancing a web of  
13   paperboard along a path, applying at least one ribbon of re-enforcing  
14   material to the web to form a reinforced region.

15          And then step C, scoring fold lines in the web of paperboard along the  
16   fold lines extending transversely to the reinforcing region and crossing the  
17   edge of the ribbon of reinforcing material to define a fold line having a first  
18   section within the reinforced region and a second section outside the  
19   reinforced region, the first section of the fold line being wider than the  
20   second section of the fold line, and you form a transition zone between the  
21   first and second sections of the fold lines.

22          So the fold line is in the paperboard the whole time, the whole way  
23   across. And claim 11 is drawn to how you do it using this multi-point  
24   scoring rule with a narrow first section and a wider second section to score  
25   these two parts of the fold line. And a point is -- at points are -- a point,

1 that's a width that -- I think it is equal to a thousandth of an inch.

2 So the examiner here --

3 JUDGE HORNER: Can I interrupt you for one minute?

4 MR. CALVERT: Yes, ma'am.

5 JUDGE HORNER: Would you point me in figure 11 -- I'm having  
6 trouble seeing how that transition zone is formed.

7 MR. CALVERT: Okay.

8 JUDGE HORNER: Is it shown in figure 11? I mean, I see --

9 MR. CALVERT: Yes, in figure 11, you see there is a groove running  
10 along under 179.

11 JUDGE HORNER: Okay.

12 MR. CALVERT: And there is a groove under 178, and right where  
13 those two come together, there is a widened little area there, a little transition  
14 zone area right at that point.

15 And actually, if you look at figure 13, figure 13 is a section right  
16 through the rules showing how they -- when they come down, there is --  
17 actually, the groove that they come down into on the -- on the --

18 JUDGE HORNER: Okay.

19 MR. CALVERT: -- plate has that widened section in it, so when the  
20 rules come down, they will form that transition zone as they come down.

21 JUDGE HORNER: So the groove tapers.

22 MR. CALVERT: Pardon me?

23 JUDGE HORNER: Does the groove taper between the wider and --

24 MR. CALVERT: Yes, it sure does.

25 JUDGE HORNER: Okay. I see.

1           MR. CALVERT: Yes, as shown in figure -- well, figure 10, for  
2 example.

3           Now, the examiner has a 103 rejection. He has -- first of all, he takes  
4 the Campbell reference, which we saw in the previous case -- Campbell is  
5 making carton blanks. He has a carton and what he does is he applies cloth  
6 tapes.

7           He wants to reinforce the score lines, so he applies cloth tapes to the  
8 carton, and while the adhesive is still wet, he impresses the score line, such  
9 as those vertical score lines 9 in figure 1, he impresses them so they run right  
10 across the combination of the paperboard and the tape.

11          And he does it while the glue is still wet so that the tape and the  
12 paperboard can move relative to each other and there won't be a break in  
13 adhesion between the two. They can shift, you know, adjust their position a  
14 little bit.

15          Now, of course, this doesn't show anything about wider fold lines or  
16 anything. So the examiner goes to Seufert, 916 reference. Seufert is making  
17 a carton or a carton blank, I should say, for a carton which has, like, a clear  
18 plastic window in the carton.

19          So you see in figure 1, for example, he has the carton blank made of  
20 cardboard, and then he has this piece of plastic, plastic foil, he calls it, which  
21 he is going to adhere over the window in the carton blank, and it is adhered  
22 right along that dotted area around the edges of the plastic.

23          Now, he has got score lines. He puts score lines, 12, in the cardboard,  
24 and he puts score lines, 13, in the plastic, and he puts them in there before he  
25 joins the two together. Then he adheres the two together and, I guess,

1 hopefully, the score lines 12 and 13 will line up.

2 Now, he is concerned about the fact that after you adhere together and  
3 you bend the combination on the score lines, that you will get some kind of a  
4 stress where the combination of the plastic and the cardboard is bent. So he  
5 puts in these thinned areas, 17, in the plastic and that will relieve the stress  
6 caused by the bending.

7 Now, the examiner -- the examiner says 17, the thinned areas, are  
8 widened grooves, I guess. So the examiner says -- the examiner doesn't  
9 really say how he thinks these references can be put together.

10 All the examiner really says is that -- quote his language here -- he  
11 says, quote, It would be obvious to, quote, include the teachings of Seufert in  
12 the invention of Campbell. That's it.

13 Now, we don't -- we have a hard time seeing how you are going to do  
14 that. I mean, in the first place, Campbell puts the reinforcing tapes on the  
15 cardboard or the paperboard and then scores the whole thing.

16 And Seufert, on the other hand, is scoring the paperboard first and  
17 scoring the plastic first, which, of course, is not reinforcing material, but we  
18 won't worry about that. I guess it does some reinforcement, and then he puts  
19 them together.

20 Now, you see in figure 3, for example, of Seufert, he shows an  
21 enlarged picture of the area where the plastic and the paperboard are joined.  
22 And you will see the grooved 12 in the paperboard goes right on underneath  
23 the plastic, doesn't change its width whatsoever.

24 And this thinned area, 17, is up on top of the plastic, and you can see  
25 in figures 5 through 9 and 13 down there, he shows different shapes that this

1 thinned area can be but he does not change the shape of the width of the  
2 groove that's in the paperboard.

3 Now, it is not -- really not clear how -- the examiner doesn't explain  
4 how these two are going to go together. I guess the best you can put on it it  
5 is somehow you are going to have a thinned area on the tape, I guess.

6 But even if you do that, even if you combine them that way, you --  
7 they still -- the combination still wouldn't read on the claim because the  
8 claim says you have to have -- that these fold lines are in the web of  
9 paperboard and the fold line has to have a first section which is wider and  
10 the second section which is narrower.

11 Even with the combination, you wouldn't have a fold line in the  
12 paperboard, which is narrower and then becomes wider as it goes into the  
13 reinforced region. So even with this combination of references, you don't  
14 have the claimed combination.

15 And even assuming you can put the two references together -- and I  
16 really don't see how you can put them together, frankly, because the problem  
17 with Seufert is he has got one fold line underneath in the cardboard and he  
18 has got a second, quote, fold line, widened fold line, up on top of the  
19 material that's on the paperboard.

20 So he has got, like, two different fold lines, two different levels, not  
21 like Campbell; Campbell just has the one fold line going, zip, right through  
22 the whole thing. So we just don't think this combination can -- can work  
23 here. We don't see how to combine it in the first place, and even if you do  
24 combine it, it doesn't seem to meet the terms of the claims.

25 He cites a couple of other references for some of these dependent

1 claims. One is just another Seufert reference, Seufert 206, to show using the  
2 platen die, and Haddock shows using this counter-plate with grooves in it,  
3 which just details how the things are made.

4 But the basic combination is this Campbell in view of Seufert 916,  
5 and we just don't think that the claims are obvious over that combination of  
6 references.

7 If you have any questions, I will be glad to answer them.

8 JUDGE BAHR: On the spec -- in the specification on page 36, on  
9 lines 24 through 26, there is a statement in there, "As is known by those of  
10 skill in the art, fold lines in thinner material must be narrower than fold lines  
11 in thicker material."

12 MR. CALVERT: Right. Uh-huh.

13 JUDGE BAHR: Given that that is known in the art, wouldn't it have  
14 been obvious to apply that to Campbell, and where there is a double  
15 thickness there, put wider fold lines in the double thickness as compared  
16 with that single thickness material?

17 MR. CALVERT: It might be. Of course, the examiner hasn't said  
18 anything about that, of course, but you still have to have a way to do it. You  
19 know, there still has to be a way to do it.

20 Campbell is doing it, apparently, by some kind of rollers which go  
21 across, right across there. And there is no indication of how -- how you are  
22 going to make that if you did do it that way. So this does give a way to do it.  
23 There is really no teaching of a way to do it.

24 JUDGE BAHR: One of ordinary skill in the art -- this is such a  
25 complex process, you don't think one of ordinary skill in the art would be



1   able to come up with a way to do that?

2           MR. CALVERT: I don't know. I'm not skilled in the art. I don't  
3   know. The examiner -- as I said, the examiner hasn't really addressed that,  
4   so, you know, it is kind of hard to say. I can't really tell offhand.

5           JUDGE CRAWFORD: Anything else?

6           Thank you.

7           Whereupon, the proceedings at 2:01 p.m. were concluded.